

REMARKS/ARGUMENTS

Claims 1-30 and 36-40 are pending and have been rejected again. Applicants have amended claims 1 and 36-38 and cancelled claim 39. In view of the amendments and arguments here in below, Applicants respectfully request reconsideration and allowance of claims 1-30, 36-38 and 40.

A telephone interview was conducted on February 9, 2007, between Applicants' undersigned representative and Examiners Calamita and Fredman. Applicants are grateful for both Examiners joining the interview. Applicants submit that the amendments and the following responses are presented taking into consideration the discussion during the interview.

Claims 1-3, 5, 9, 10, 11 and 13 stand rejected under 35 U.S.C. §102(b) as being anticipated by Rothschild (US Patent No. 5,986,076). Applicants respectfully disagree.

With regard to claim 1, Applicants first submit that Rothschild does not teach "analyzing the labeled polyphosphate". Rather, Rothschild teaches, as the Examiner stated, analyzing "the PCR product" (column 37 and table). Applicants submit that the current invention clearly describes the meaning of "polyphosphate". The specification describes in multiple places the relationship of nucleoside, nucleotide and polyphosphate, and these discussions clearly define the polyphosphate as the "inorganic polyphosphate", not the primer nor the template or the extended nucleic acid product. For example, during discussion of the term "phosphatase", it was discussed that the enzyme could not cleave

“a terminal phosphate labeled nucleoside polyphosphate”, but could “remove the phosphate unit from the resultant dye polyphosphate” (page 13, paragraph 33). Also for example, paragraph 42 discusses the substrates used by this invention as “a nucleoside polyphosphate analogue”, and states “an enzyme-activatable label is present on the inorganic polyphosphate by-product” (page 13, second line from bottom). Also see paragraph 43 and the reaction scheme immediately follows on page 14. Applicants submit that the “polyphosphate” in the current invention is clearly not “the PCR product” of Rothschild. In an effort to expedite prosecution, Applicants have amended claim 1 to clearly state that the labeled polyphosphate is “labeled inorganic polyphosphate by-product”.

Again with regard to claim 1, Applicants submit that Rothschild clearly states that the polymerase reaction (i.e. PCR) is carried out using “normal dNTPs” (column 36, line 40-41) and a labeled primer. Applicants submit that the claim language in the instant invention requires a primer and “at least one terminal phosphate-labeled nucleotide”. Applicants submit that this language and the specification, as a whole, clearly set forth the invention such that the terminal phosphate labeled nucleotide is separate from the primer. Applicants submit that this also clearly differentiates the claimed invention from the disclosure of Rothschild.

In view of the foregoing, Applicants respectfully assert that the Examiner’s rejection of claim 1 can not be sustained and should be withdrawn. Rejections to dependent claims 2, 3, 5, 9-11 and 13 should also be withdrawn.

Claims 7, 8, 16-26 and 36-39 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Rothschild, further in view of Williams (US Patent No. 6,255,083). Applicants respectfully disagree.

In response, Applicants submit that as discussed above in response to the 35 U.S.C. §102(b) rejection, Applicants have presented clear differences between the instant invention and the Rothschild reference. As such, Applicants submit that inasmuch as claim 1 is not anticipated by Rothschild, rejection to the dependent claims 7, 8 and 16-26 is improper.

With regard to claims 36-38, Applicants submit they relate to the detection and characterization of multiple analytes, but they are similar to claim 1. Similar amendments are presented for these claims. Applicants submit that as discussed above in response to the 35 U.S.C. §102(b) rejection, Applicants have presented clear differences between the instant invention of these claims and the Rothschild reference. As such, Applicants submit that inasmuch as claim 1 is allowable, rejection to the similar claims 36-38 is improper.

Dependent claim 39 has been canceled as it does not further restrict claim 38. Applicants submit that for these reasons, the 35 U.S.C. §103(a) rejection of claims 7, 8, 16-26 and 36-39 is moot.

Claims 4, 6, 14, 15 and 40 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Rothschild, further in view of Williams (US Patent No. 6,936,702). Applicants respectfully disagree.

In response, Applicants submit that as discussed above in response to the 35 U.S.C. §102(b) rejection, Applicants have presented clear differences between the instant invention and the Rothschild reference. As such, Applicants submit that inasmuch as claim 1 is not anticipated by Rothschild, rejection to the dependent claims 4, 6, 14, and 15 is improper.

With regard to claim 40, Applicants submit it relates to the detection and characterization of multiple analytes, but it is similar to claim 4. Applicants submit that as discussed above in response to the 35 U.S.C. §102(b) rejection, Applicants have presented clear differences between the instant invention and the Rothschild reference. As such, Applicants submit that inasmuch as claim 1 is allowable, rejection to claim 40 is improper.

Applicants submit that for these reasons, the 35 U.S.C. §103(a) rejection of claims 4, 6, 14, 15 and 40 is moot.

Claim 12 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Rothschild, further in view of Nikiforov. This reference is neither identified nor provided by the Examiner in this or previous Office action. (Examiner erroneously cited Williams in the first paragraph of Section 5, although Nikiforov was discussed in the paragraphs that follow.) Applicants respectfully request further information about this Nikiforov reference.

Nonetheless, Applicants submit that as discussed above in response to the 35 U.S.C. §102(b) rejection, Applicants have presented clear differences between the instant

invention and the Rothschild reference. As such, Applicants submit that inasmuch as claim 1 is allowable, the 35 U.S.C. §103(a) rejection of dependent claim 12 is improper.

Applicants submit that for these reasons, the 35 U.S.C. §103(a) rejection of claim 12 is moot.

Claims 28-30 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Rothschild and Williams (US Patent No. 6,255,083) further in view of Mandecki (US Patent No. 6,001,571). Applicants respectfully disagree.

In response, Applicants submit that as discussed above in response to the 35 U.S.C. §102(b) rejection, Applicants have presented clear differences between the instant invention and the Rothschild reference. As such, Applicants submit that inasmuch as claim 1 is anticipated, rejection to the dependent claims 28-30 is improper.

Applicants submit that for these reasons, the 35 U.S.C. §103(a) rejection of claims 28-30 is moot.

Claim 27 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Rothschild and Williams (US Patent No. 6,255,083) in view of Parker et al. (US Patent No. 5,565,323). Applicants respectfully disagree.

In response, Applicants submit that as discussed above in response to the 35 U.S.C. §102(b) rejection, Applicants have presented clear differences between the instant invention and the Rothschild reference. As such, Applicants submit that inasmuch as claim 1 is not anticipated, rejection to the dependent claim 27 is improper.

Applicants submit that for these reasons, the 35 U.S.C. § 103(a) rejection of claim 27 is moot.

Applicants respectfully assert that the claims are in allowable form and earnestly solicit the allowance of claims 1-30, 36-38 and 40.

Early and favorable consideration is respectfully requested.

Respectfully submitted,

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